

**U.S. Department of the Interior
Bureau of Land Management**

**Environmental Assessment
DOI-BLM-NV-S010-2012-0019-EA
January 2012**

Right-of-Way for Underground Water Pipelines on Public Lands

APPLICANT

Las Vegas Valley Water District, Nevada

GENERAL LOCATION

The proposed action is located in the northwest Las Vegas Valley within the Shaumber Road Alignment, between Centennial Parkway and Hammer Lane

BLM CASE FILE SERIAL NUMBER(S)

N-90405 & N-90405-01

PREPARING OFFICE

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CHAPTER 1. INTRODUCTION

1.1 Identifying Information

DOI-BLM-NV-S010-2012-0019-EA

1.1.1 Title, EA Number, and Type of Project

Title: Right-of-Way for Underground Water Pipelines on Public Lands (Referred to as the Las Vegas Valley Water District Zone 3090 Pipeline.)

EA Number: DOI-BLM-NV-S010-2012-0019-EA

Permanent and short-term right-of-way for the installation of underground water pipelines.

1.1.2 Location of Proposed Action

The rights-of-way are located along the east and west side of the Shaumber Road alignment between Centennial Parkway and Hammer Lane and encompasses a total of 9.2 acres of land.

Permanent Right-of-Way N-90405:

Mount Diablo Meridian, Nevada,

T.19 S., R.59 E., sec. 25, W $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, E $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, E $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$.

T. 19 S., R.59 E., sec. 36, E $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$.

Short-Term Right-of-Way N-90405-01:

T.19 S., R.59 E., sec. 25, W $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$.

T.19 S., R.59 E., sec. 36, E $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$.

1.1.3 Name and Location of Preparing Office

Department of the Interior
Bureau of Land Management
Las Vegas Field Office
4701 N. Torrey Pines
Las Vegas, Nevada 89130

Office Number: LLNVS00560

1.1.4 Identify the Subject Function Code, Lease, Serial or Casefile Number

Casefile number(s): N-90405 (permanent) and N-90405-01 (temporary)

1.1.5 Applicant Name

Las Vegas Valley Water District, Nevada

1.1.6 Existing NEPA Documentation

The following documents are tiered to as appropriate for indirect, site specific, and cumulative analysis:

- Las Vegas Resource Management Plan and Final Environmental Impact Statement, Record of Decision signed October 5, 1998.
- Las Vegas Valley Disposal Boundary Environmental Impact Statement, Record of Decision signed December 23, 2004, available at www.nv.blm.gov/lvdiseis.
- Recreation and Public Purpose (R&PP) Lease/Patent of N-88117 for a Northwest Transportation Facility, DOI-BLM-NV-S010-2010-0057-EA.

1.2 Purpose and Need for Action

Current and planned development in the area of the selected route, require the installation of additional water pipeline facilities to meet the public's health and safety needs. The Las Vegas Valley Water District (District) is responsible for providing a reliable source of potable water and fire protection within the City of Las Vegas. The proposed underground pipeline facilities are designed to accommodate required flow rates and meet anticipated public needs for water, including those associated with the Clark County School District Northwest Transportation Facility.

1.3 Scoping, Public Involvement, and Issues

The proposed project is located in the northwest portion of the Las Vegas Valley along the Shaumber Road alignment, between Centennial Parkway and Hammer Lane.

The proposed underground pipeline facilities are designed to accommodate required flow rates and meet current and anticipated public needs for potable water and fire suppression in the general area and for the Clark County School District Northwest Transportation Facility.

Stipulations will be attached to the right-of-way grants which will include conservation and protection measures for natural resources, cultural resources, Threatened and Endangered (T&E) Species, and the environment.

This proposal has been reviewed by Bureau of Land Management (BLM) resource team members. Their comments and evaluations are included in this Environmental Assessment (EA).

Internal scoping was done for the project and the following concerns were raised:

- Since the proposed action is a construction project encompassing more than 0.25 acres, ensure compliance with Clark County Department of Air Quality and Environmental Management (DAQEM) requirements;
- Prevention should be taken for the spread of or introduction of Noxious Weeds within and adjacent to the proposed action;
- The proposed project may impact several cacti and yucca's;
- The proposed project may impact migratory birds if construction/disturbance occurs during the bird breeding season;
- The lands included in the proposed action have been previously surveyed for cultural resources; and
- The proposed project is located in desert tortoise habitat, a federally listed threatened species.

A summary of this EA is available for review by the public on the internet on the DOI.GOV website under NEPA number: DOI-BLM-NV-SO10-2012-0019-EA.

CHAPTER 2. PROPOSED ACTION AND ALTERNATIVES

2.1 Description of the Proposed Action: Alternative Number 1

The District plans to install underground water pipelines to provide a reliable source of potable water and fire protection for the Clark County School District's Northwest Transportation Facilities (NWTF) and planned development in the area. The District refers to this project as the Las Vegas Valley Water District Zone 3090 Pipeline (LVVWD Zone 3090 Pipeline). The proposed permanent right-of-way (ROW) is approximately 6,101 feet long, and varies in width from 10 feet to 55 feet. A short-term ROW for use during construction that is approximately 4,115 linear feet long and 30 to 35 feet wide will also be needed. The District plans to install 24-inch diameter iron ductile and 12-inch diameter PVC underground pipelines along with all of the related appurtenances and stub outs.

2.1.1 Permanent Right-of-Way

The permanent ROW will be located along the east and west side of the Shaumber Road alignment between Centennial Parkway and Hammer Lane. Between Centennial Parkway and Ann Road, the permanent ROW area will be approximately 4,363 linear feet long and 10 to 50 feet wide, (40 feet on the west side and 10 feet on the east side of the roadway centerline), and will consist of installation of an underground 24-inch diameter iron ductile pipe. From Ann Road, to Hammer Lane, the ROW area will be approximately 1,738 linear feet, with a width of 45 to 55 feet, and consists of construction of an underground 12-inch diameter PVC pipeline.

The total permanent ROW requested crosses approximately 6,101 linear feet of public land with a width of 10 to 55 feet, totaling approximately 254,340 square feet (5.8 acres).

The depth of the trench is anticipated to be 10 to 20 feet. The width of the bottom of the trench varies from seven to 20 feet to allow for a two feet work area on each side of the pipe. From the top of the pipe to grade, the trench must be sloped on each side at a 1:1 ratio. This creates top of trench openings of 28 to 52 feet.

The District will need the entire 50 to 55 foot permanent ROW for construction and on-going maintenance and repair activities for the foreseeable future. Therefore, the permanent ROW is requested to be granted in perpetuity.

2.1.2 Short-Term Right-of-Way

The short-term ROW will be located along the east side of the Shaumber Road alignment between Centennial Parkway and Hammer Lane. Between Centennial Parkway and Ann Road, the ROW area will be approximately 3,703 linear feet long, 30 feet wide and contiguous with the permanent ROW within the east side of the Shaumber Road alignment. From Ann Road south to Hammer Lane, the short-term ROW area will be approximately 1,108 linear feet long, 35 feet wide, and contiguous to the east side of the permanent ROW.

The total short-term ROW area requested is approximately 4,811 feet long, 30 to 35 feet wide, totaling 149,870 square feet or 3.44 acres and is contiguous with the permanent ROW for this

project. During pipeline installation, the short-term ROW will allow for traffic control, pipeline storage, excavated material placement, as well as accommodate the movement of installation equipment. Standard construction practices will be used for the installation. Equipment used will include dump trucks, flat bed trailers, backhoes, front end loaders, water trucks, pick-up trucks, traffic control devices and other related equipment as needed. The short-term ROW area will be needed for 3 years.

2.1.3 Construction

The work force will include an estimated 10 to 30 people, including survey crews, inspectors, contractors, laborers and equipment operators. However, it is unlikely all 30 people will be on site at one time, preconstruction activities are anticipated to begin upon issuance of the ROW. Construction is expected to begin as soon as possible and take approximately 36 months to complete. The use of some heavy machinery will be needed for construction, including grading equipment, backhoes, water trucks, pick-up trucks, loaders, dump trucks, cranes and any other equipment needed to complete construction. Any excess mineral material produced from construction activities will be stockpiled within the ROW or disposed of in a manner acceptable to BLM.

Soil Stabilization and Reclamation

Upon completion of construction, the area will be backfilled and restored to its previous/natural state. In those areas where there are no current roadway improvements, the land will be re-contoured as necessary to match the existing grade, and the appropriate stabilization and rehabilitation measures will be completed in conformance with the requirements of the BLM, the State of Nevada Division of Environmental Protection, and Clark County "Department of Air Quality and Environmental Management.

Construction Timeline:

- ROW centerline is staked; ROW exterior limits are staked and fenced across federal lands.
- Top six inches of previously disturbed ROW is scraped and moved to the side along the pipeline route.
- Plant material is removed from undisturbed ROW and disbursed per federal stipulation requirements; top six inches are then scraped and moved to the side along the pipeline route.
- The prefabricated pipe sections (40 to 50 feet long) are delivered to the site and laid out along the ROW prior to installation.
- Trench is dug with backhoe; rock saws may be used depending on the soil.
- Bedding added and compacted; zinc anodes for cathodic protection is laid into place.

- Pipeline, valve vaults, blowoff valves, air valves and test stations are installed.
- Trench backfilled and ROW cleared of equipment and fencing; returned to drivable condition.
- Pipeline is pressure tested and disinfected.

2.2 Description of Alternatives Analyzed in Detail

Only one alternative, the No Action, has been identified for this project.

2.2.1 No Action: Alternative Number 2

The No Action alternative would result in the BLM not issuing ROW's for the water pipeline and related facilities. Since the proposed route is the most direct and cost effective option, the District would have to find another less efficient and costly route to provide a reliable source of potable water and fire flow protection for the public.

2.3. Alternatives Considered but not Analyzed in Detail

2.3.1 Alternative Number 3

No other alternatives were considered.

2.4 Conformance

The proposed action is in conformance with the Las Vegas Resource Management Plan (RMP) decisions RW-1, and RW-1-h, approved on October 12, 1998.

- RW-1 - "Meet public demand and reduce impacts to sensitive resources by providing an orderly system of development for transportation, including legal access to private in holdings, communications, flood control, major utility transmission lines, and related facilities."
- RW-1-h - "All public land within the planning area, except as stated in RW-1-c through RW-1-g, are available at the discretion of the agency for ROW's under the authority of the Federal Land Policy and Management Act.

ROW's are allowable on BLM administered lands per Title V of the Federal Land Policy and Management Act of 1976 and the BLM regulations (43 CFR 2800), at the discretion of the Secretary of the Interior or his/her delegated officer.

CHAPTER 3. AFFECTED ENVIRONMENT

Supplemental Authority	Not Present	Present/ Not Affected	Present/ May be Affected	Rational
Air Quality		X		Ensure dust control permit is obtained through DAQEM for all soil disturbing activity of 0.25 acres or greater, in the aggregate and permit stipulations are in compliance for the duration of the activity. At present, water is the only means by which BLM authorizes dust suppression for construction activities, as well as for operations and maintenance of public land activities known to generate fugitive dust.
Area of Critical Environmental Concern (ACEC)	X			The proposed project area is not within an ACEC or any critical desert tortoise habitat.
Cultural/ Historical	X			To comply with Section 106 of the National Historic Preservation Act (NHPA), the BLM Archaeologist conducted an existing data review of the area of potential effect (APE) according to 36 CFR 800.4. The APE was previously evaluated in support of the Valley Disposal Boundary Environmental Impact Statement (EIS). Results are detailed in BLM Cultural Resource Report 5-2467. There are no historic properties within the APE; no further evaluation is required unless the scope of the undertaking changes. As proposed, the undertaking will have no effect to historic properties.
Paleontological Resources	X			No fossil-bearing strata will be impacted by the undertaking as proposed.
Environmental Justice		X		Any minority or low income group present within the project area would not be disproportionately impacted by health or environmental effects.

Supplemental Authority	Not Present	Present/ Not Affected	Present/ May be Affected	Rational
Farmlands Prime or Unique	X			There are no prime or unique farmland designations in the district.
Noxious Weeds/Invasive Non-native Species		X		The Las Vegas Valley Disposal Boundary EIS approved by ROD dated 12/23/2004, should provide adequate guidelines for noxious weed control measures necessary to this In-Valley proposal. Responsibility for present and future weed monitoring and weed abatement activities will be clearly acknowledged in the proposal.
Native American Religious Concerns	X			An ethnographic assessment was conducted in support of the Valley Disposal Boundary EIS by the Chambers Group. The Nevada State Historic Preservation Office (SHPO) concurred on the adequacy of the report and consultation efforts. No Native American concerns were identified for this portion of the Las Vegas Valley; no further analysis is required.
Floodplains	X			There are no floodplains present in the project area
Riparian/ Wetlands	X			Proposed action does not occur in a wetland/riparian zone.
Threatened, Endangered or Candidate Plant Species	X			Not Present.
Threatened, Endangered or Candidate Animal Species			X	See EA language below and attached Terms and Conditions. This notice will serve as the Section 7 Determination and no additional paperwork will be provided (Sec 7 Log # NV-052-12-028).
Migratory Birds			X	See EA language and mitigation measures below.

Supplemental Authority	Not Present	Present/ Not Affected	Present/ May be Affected	Rational
Waste - Hazardous/Solid		X		No issues. Ensure standard Hazmat Stipulations are attached to the grant or authorization.
Water Resources/Quality (drinking/surface/ground)		X		Temporary impacts to surface water run-off and quality due to activities may occur, but no significant negative long term impacts are expected as long as BMPs are followed
Wild & Scenic Rivers	X			Not Present.
Wilderness (Study Area)	X			The proposed action is not located within or adjacent to designated Wilderness, WSAs, or ISAs.
Woodlands/Forestry (Continued)				The proposed project is in an area known to contain high densities of cactus and yucca. High numbers of cactus and yucca may be present within the project impact area. Cactus and yucca are considered government property and are regulated under the Nevada BLM forestry program. If unable to be avoided, <i>all cactus and yucca within permanent and temporary impact areas must be salvaged and replanted in temporary impact areas or undisturbed portions of the project area with the following exception: all beavertail cactus (<i>Opuntia basilaris</i>) are to be salvaged and delivered to the Red Rock Canyon National Conservation Area (RRCNCA) Visitor Center.</i> This delivery needs to be coordinated with Amelia Savage, RRCNCA Wildlife Biologist (702-515-5278), providing her at least 1 week notice of delivery. Salvaged cactus and yucca will be planted at the RRCNCA Visitor Center by BLM staff or volunteers under BLM supervision. Unless
Woodlands/Forestry		X		

Supplemental Authority	Not Present	Present/ Not Affected	Present/ May be Affected	Rational
				otherwise directed by the BLM botanist, all replanted cactus and yucca must be watered and otherwise maintained for a period of one year. To ensure successful salvage and transplant, all cactus and yucca must be salvaged using a contractor (or other approved by the BLM botanist) with at least three years' experience salvaging and maintaining plant materials in the Mojave or Sonoran Deserts.

Other resources of the human environment that have been considered for this environmental assessment (EA) are listed in the table below. Rationale for those elements that would not be affected by the proposed action and alternative are presented in this table. Elements that may be affected are further addressed in the EA.

Supplemental Authority	Not Present	Present/ Not Affected	Present/ May be Affected	Rational
Grazing Management	X			The proposed action area is not located in any authorized grazing allotments.
Green House Gas Emissions (Climate Change)		X		Currently there are no emission limits for suspected Greenhouse Gas (GHG) emissions, and no technically defensible methodology for predicting potential climate changes from GHG emissions. However, there are, and will continue to be, several efforts to address GHG emissions from federal activities, including BLM authorized uses
Geology/Mineral Resources/ Energy Production		X		The excess mineral materials generated during this project must stay onsite or be disposed of in accordance with 43 CFR 3600 regulations.

Supplemental Authority	Not Present	Present/ Not Affected	Present/ May be Affected	Rational
Lands/Access		X		Send notification letter to those ROW holders subject to, near, and adjacent to the ROW.
BLM Natural Areas	X			There are no such designations within the Field Office.
Rangeland Health Standards		X		The proposed action includes only minimal surface disturbance; therefore there will be no impacts to rangeland health.
Socio-Economic values		X		This project will not disproportionately impact social or economic values.
Soils		X		The proposed action will disturb native soils through the construction of the line itself, as well as through the creation of temporary work areas which would be cleared and leveled and the construction of a new service road. Recontouring were applicable and BMPs should be implemented to minimize impacts beyond the waterline.
Hydrologic Conditions		X		Area is located within the Las Vegas Valley. No additional impacts to local hydrologic conditions.
Vegetation Excluding Federally Listed Species	X			There are no known occurrences of BLM sensitive species within the area. If there are unknown occurrences of BLM sensitive species within the project site, due to the small amount of disturbance, potential impacts would be negligible.

Supplemental Authority	Not Present	Present/ Not Affected	Present/ May be Affected	Rational
Visual Resources		X		The proposed action is in VRM Class III, which aims to partially retain the existing character of the landscape. Levels of change to the landscape can be moderate, but should not dominate the view of the casual observer. Since the proposed action is adjacent to existing developments, it is not expected to dominate the view of the casual observer. Please ensure that change repeats the basic elements of form, line, color, and texture found in the natural landscape to the extent practical. No issues.
Recreation	X			Not Present.
Fuels/Fire Management	X			During construction normal conformance with seasonal fire restrictions is adequate. Restrictions can be in effect any time between May 15 and Oct. 1. Specific activities may be waived on a case by case basis by a line officer after review and approval by the Fire Management Officer.
Fish and Wildlife Excluding Federally Listed Species			X	Wildlife species in the general area include small mammals, rodents, birds and reptiles. Additionally, the BLM sensitive species <i>western burrowing owl</i> , <i>chuckwalla</i> , <i>banded gila monster</i> , <i>Mojave shovel-nosed snake</i> , <i>desert glossy snake</i> , <i>Mojave Desert sidewinder</i> may be present in the general area. These species would be displaced as lands are disturbed within the project area. The primary direct impacts of the proposed action on wildlife would be killing or maiming of ground dwelling animals and less mobile species (such as reptiles) during construction, displacement of individuals, the loss and fragmentation of habitat. Additional impacts

Supplemental Authority	Not Present	Present/ Not Affected	Present/ May be Affected	Rational
Fish and Wildlife Excluding Federally Listed Species (Continued)				associated with the mortality from vehicular traffic may also occur. Wildlife species in the general area are common and widely distributed throughout the area and the loss of some individuals and/or their habitat would have a negligible impact on populations of the species throughout the region. Impacts to BLM Sensitive Species are not anticipated to lead to further decline of the species range wide as the total disturbance for this project is relatively small.
Wild Horse and Burros	X			This project is not located in an active herd management area, there will be no impacts to wild horses or burros.
Areas with Wilderness Characteristics	X			The proposed action is located in areas which do not meet the elements of wilderness characteristics.

3.1 Air Quality

The United States Environmental Protection Agency (USEPA) changed the standard for ozone from .084 ppb to .075 ppb, in March of 2008. This new standard will require implementation of Volatile Organic Compound (VOC) reduction strategies. There are a number VOC reduction strategies, including but not limited to reformulated fuel, vapor recovery, double walled underground storage tanks, increase mass transit and car pooling. It is not known at this time which of these reduction strategies would be implemented by Clark County Department of Air Quality and Environmental Management (CCDAQEM) as part of the State Implementation Plan (SIP) to show attainment for the ozone standard. BLM will work closely with Clark County to ensure BLM authorizations are included as part of the SIP for the affected area. It is anticipated that the USEPA will issue new non-attainment designations in 2010, so Clark County does not have any SIP or plan requirements under the revised NAAQS at this time.

3.2 Threatened, Endangered Species

Threatened and endangered species are placed on a federal list by the U. S. Fish and Wildlife Service (USFWS) and receive protection under the Endangered Species Act of 1973, as amended. The only T&E species known to occur in the vicinity of the project area is the

threatened desert tortoise (*Gopherus agassizii*).

In the Mojave region, the desert tortoise occurs primarily on flats and bajadas with soils ranging from sand to sandy-gravel characterized by scattered shrubs and abundant inter-shrub space for herbaceous plant growth. They are also found on rocky terrain and slopes.

This project lies within the Las Vegas Valley programmatic area and is adjacent to undisturbed desert tortoise habitat. Desert tortoise survey data conducted for the preparation of the Disposal Boundary EIS indicates there are live tortoise and tortoise burrows located within less and a quarter mile of the proposed project site.

3.3 Migratory Birds

Under the Migratory Bird Treaty Act of 1918 (MBTA) and subsequent amendments (16 U.S.C. 703-711), it is unlawful to take, kill, or possess migratory birds. A list of the protected bird species can be found in 50 C.F.R. § 10.13. The list of birds protected under this regulation is extensive and the project site has potential to support many of these species, including the BLM sensitive species the western burrowing owl (*Athene cunicularia*). Typically, the breeding season is when these species are most sensitive to disturbance, which generally occurs from March 15 through July 30.

CHAPTER 4. ENVIRONMENTAL EFFECTS

4.1 Air Quality

Simulations using the Argonne National Laboratory cumulative air modeling assessment indicated potential for future ozone concentrations from development of disposed lands to temporarily exceed the 0.084 ppb standard for select areas of Las Vegas Valley. The temporary exceedances were considered a “worst-case” scenario because the model was constructed using very conservative approaches and only included reformulated fuels as a VOC reduction strategy. The Argonne National Laboratory air-quality model also assumed a disposal rate of approximately 4,000 acres per year based upon the rate of sales at the time and the assumption that the market could support this rate of disposal into the foreseeable future. In the past 2-3 years, deteriorating economic conditions have reduced demand for additional housing and land; the number of acres actually disposed has dropped considerably in the Las Vegas Valley from a high of 10,000 acres [2003-2006] to a low of 100 acres [2007-2010]. The current downward trend in land sales is expected to continue for the next several years based on the present economic conditions.

The results projected in the ozone model still adequately address future expected levels of ozone in the Las Vegas Valley. Future ozone concentrations resulting from development of disposed lands probably will be less than predicted by the model because of the greatly reduced rate of land disposal, conservative modeling approaches and likely implementation of VOC reduction measures not considered in modeling scenarios. The current 0.075 ppb ozone standard is not likely to be exceeded based upon this rationale, but there is some uncertainty involved with modeling results. In order to address uncertainty, the following measures will be implemented. BLM will coordinate with CCDAQEM to ensure federal actions are consistent with the future guidelines provided by CCDAQEM. BLM, in coordination with CCDAQEM, also will determine if additional modeling is needed in the future if disposal rates increase to initially assumed values and specific VOC reduction measures are identified and implemented under a revised SIP.

4.2 Threatened, Endangered Species

This project will disturb a total of 2.32 acres of tortoise habitat. Since tortoise sign has been found in the vicinity and undisturbed habitat exists in the area, there is potential for tortoises to wander into the project area. If not noticed and avoided during construction, desert tortoises could be either injured or killed (by crushing) or harassed (by being moved out of harm’s way). Section 7 Consultation for this project is covered under the Las Vegas Valley Biological Opinion (1-5-96-F-23R.3) contingent on compliance with the attached terms and conditions.

The proponent is required to have an authorized biologist on call to relocate any desert tortoises that enter the work area. If tortoises are encountered that must be moved out of harm’s way, the biologist will contact the BLM wildlife staff at (702) 515-5000 to identify the relocation site or whether the animal will be transferred to the Clark County Tortoise Pick-up Service.

N-90504 and N-90504-01 does not meet the required conditions as stated in term and condition

1.a. as there is no barrier to prevent relocated tortoises from reentering the project site. Therefore, a clearance survey is voluntary. If a clearance is conducted, any tortoises found must be relocated following term and condition 1.b.

Minimization measures in the above mentioned biological opinion contain measures to reduce potential impacts to desert tortoise.

In addition to attached terms and conditions, the proponent is required to adhere to the following:

Trench shall be backfilled or covered at the end of each day during hours of inactivity or the trenches shall be dug in such a manner that the side and/or end walls are contoured to allow any animals that inadvertently fall in, a means to climb out.

4.3 Migratory Birds

Migratory birds, including the BLM sensitive species the western burrowing owl (*Athene cunicularia*), may be present on the project site. The proponent will be required to adhere to the following mitigation measures:

- 1) To prevent undue harm, habitat-altering projects or portions of projects should be scheduled outside bird breeding season. In upland desert habitats and ephemeral washes containing upland species, the season generally occurs between March 15th -July 30th.
- 2) If a project that may alter any breeding habitat has to occur during the breeding season, then a qualified biologist must survey the area for nests prior to commencement of construction activities. This shall include burrowing and ground nesting species in addition to those nesting in vegetation. If any active nests (containing eggs or young) are found ,and appropriately-sized buffer area must be avoided until the young birds fledge.

4.4 Cumulative Impacts

Current and planned developments in the area, require the installation of additional water pipeline facilities to meet the public's health and safety needs. The proposed action is to install underground water pipelines to provide a reliable source of potable water and fire protection for the Clark County School District's NWTF and planned developments in the area. The ROW areas for the proposed action are located north of the Clark County School District's NWTF and within the boundary of the Shaumber Road alignment. The proposed action is located within the boundary and/or adjacent to the following ROW's:

N-81545 for Central Telephone Company dba CenturyLink's telephone lines. N-55999, N-77772, N-78524, N-90154, and N-90154-01 for the City of Las Vegas roads. N-76352, N-76431, N-80995, N-83614, N-83614-01, N-83617, and NEV-0043546 for Nevada Energy's power lines. N-58560, N-59744, N-60903, N-61323 for Clark County roads and the 215 Bruce Woodbury Beltway. N-88117-01, N-88901 for the Clark County School District's NWTF.

Notification letters were sent to the ROW holders informing them of the proposed action for installation of the underground water pipelines. No negative responses were received.

Upon completion of construction, the area will be backfilled and restored to its previous/natural state. No new or unusual effects to the surrounding resource landscape will occur. Any excess mineral material produced from construction activities will be stockpiled within the ROW or disposed of in a manner acceptable to BLM. In those areas where there are no current roadway improvements, the land will be re-contoured as necessary to match the existing grade, and the appropriate stabilization and rehabilitation measures will be completed in conformance with the requirements of the BLM, the State of Nevada Division of Environmental Protection, and Clark County "Department of Air Quality and Environmental Management.

Cumulative impacts associated with this action were previously evaluated on pages 4-58 through 4-66 of the Las Vegas Valley Disposal Boundary Environmental Impact Statement, signed March 2005.

CHAPTER 5. TRIBES, INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED:

Table 5.1. List of Persons, Agencies and Organizations Consulted

Name	Purpose & Authorities for Consultation or Coordination
Paul Misky, SR Right-of-Way Agent, Las Vegas Valley Water District	Applicant
Linda Perri, Director, Clark County School District Real Property Management.	Proponent
Bill Garrett, Ventajas LLC	Consultant
Vernon Harkins, P.E., LR Nelson	Engineering
City of Las Vegas	Municipality with jurisdiction
Clark County	Existing roadway and I-215 Beltway authorized Rights-of-Way.
Nevada Energy	Existing power line/facilities Rights-of-Way.
Central Telephone Company dba CenturyLink	Existing telecommunication authorized Right-of-Way.

CHAPTER 6. LIST OF PREPARERS

Table 6.1. List of Preparers

Name	Title	Responsible for the Following Section(s) of this Document
Dorothy J. Dickey	Realty Specialist	Land/Access, Visual Resources, Review and Editing.
Lisa Christianson	Environmental Protection	Air Quality and Greenhouse Gas Emissions.
Katie Kleinik	Natural Resource Specialist	Livestock Grazing, Rangeland Health, Woodlands/Forestry (Cactus/Yucca), Threatened, Endangered or Candidate (Plant Species), and Vegetation Excluding Listed Species.
Mike Moran	Environmental Protection	HazMat Specialist
Susanne Rowe	Archaeologist	Cultural Resources, Native American Religious Concerns, and Paleontology,
Jessica Stegmeier	Wildlife Biologist	Areas of Critical Environmental Concern, Fish & Wildlife, Migratory Birds, and Threatened, Endangered or Candidate (Animal Species),
Marilyn Peterson	Recreation Specialist	Wild and Scenic Rivers, and Recreation
Boris Poff	Hydrologist	Floodplains, Hydrologic Conditions, Riparian/ Wetlands, Soils, Water Resources/Quality (Drinking/Surface/Ground), and Wetlands/Riparian Zones.
Lorri Dee Dukes	Geologist	Geology/Mineral and Resources/Energy Production.
Jill Craig	Natural Resource Specialist	Invasive Species/ Noxious Weeds
Kirsten Cannon	Public Affairs Specialist	Public Affairs.
Sendi Kalcic	Wilderness Planner	BLM Natural Areas, Wilderness, WSAs, and Areas with Wilderness Characteristics.
Greg Marfil	Fire Planner	Fuels/Fire Management.
John Evans	Planning and Environmental Coordinator	Environmental Justice, and Socio- Economic.

Krystal Johnson	Wild Horse and Burro Specialist	Farm Lands Prime and Unique, and Wild Horse and Burros.
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Appendix A. - EXHIBIT A —STIPULATIONS

Exhibit A

Stipulations N-90405 and N-90405-01

1.0 Special Stipulations

- 1.1. The proposed project is in an area known to contain high densities of cactus and yucca. High numbers of cactus and yucca may be present within the project impact area. Cactus and yucca are considered government property and are regulated under the Nevada Bureau of Land Management (BLM) forestry program. If unable to be avoided, all cactus and yucca within permanent and temporary impact areas must be salvaged and replanted in temporary impact areas or undisturbed portions of the project area with the following exception: all beavertail cactus (*Opuntia basilaris*) are to be salvaged and delivered to the Red Rock Canyon National Conservation Area (RRCNCA) Visitor Center. This delivery needs to be coordinated with Amelia Savage, RRCNCA Wildlife Biologist (702-515-5278), providing her at least 1 week notice of delivery. Salvaged cactus and yucca will be planted at the RRCNCA Visitor Center by BLM staff or volunteers under BLM supervision. Unless otherwise directed by the BLM botanist, all replanted cactus and yucca must be watered and otherwise maintained for a period of one year. To ensure successful salvage and transplant, all cactus and yucca must be salvaged using a contractor (or other approved by the BLM botanist) with at least three years' experience salvaging and maintaining plant materials in the Mojave or Sonoran Deserts.
- 1.2. Migratory birds, including the BLM sensitive species the western burrowing owl (*Athene cunicularia*), may be present on the project site. The proponent is required to adhere to number 9.0 Migratory Birds, as shown below on page 4 in the General Stipulations, as well as adhere to the following mitigation measures:
 1. To prevent undue harm, habitat-habitat-altering projects or portions of projects should be scheduled outside bird breeding season. In upland desert habitats and ephemeral washes containing upland species, the season generally occurs between March 15th - July 30th.
 2. If a project that may alter any breeding habitat has to occur during the breeding season, then a qualified biologist must survey the area for nests prior to commencement of construction activities. This shall include burrowing and ground nesting species in addition to those nesting in vegetation. If any active nests (containing eggs or young) are found, an appropriately-sized buffer area must be avoided until the young birds fledge.

2.0 General Stipulations

- 2.1. The right-of-way is issued subject to all valid existing rights.
- 2.2. No signs of advertising devices shall be placed on the premises or on adjacent public lands, except those posted by or at the direction of the authorized officer.
- 2.3. The right-of-way shall be maintained in a sanitary condition at all times. Waste materials at those sites shall be disposed of promptly at an approved waste disposal site. "Waste", as used in this paragraph, shall mean all discarded matter of any kind.

- 2.4. Holder shall mark the exterior boundaries of the right-of-way with stake and/or lath at 100 to 200 foot intervals. The intervals may be varied at the time of staking at the discretion of the Authorized Officer. The tops of the stakes and/or laths will be painted and the laths flagged in a distinctive color as determined by the Holder. Holder shall maintain all boundary stakes and/or laths in place until final cleanup and restoration is completed.
- 2.5. The Holder, as a political subdivision of the State of Nevada, shall be held liable in accordance with the provisions of 43 CFR 2807.13(a) which replaces 43 CFR 2803.1-5(f).
- 2.6. Holder shall conduct all activities associated with construction, operation, maintenance and termination of this right-of-way within its authorized limits.
- 2.7. Holder shall maintain the right-of-way in a safe, useable condition, as directed by the Authorized Officer. A regular maintenance program shall include, but is not limited to, soil stabilization.
- 2.8. Holder shall maintain copy of the authorization along with stipulations on construction site at all times. In the event that the public land underlying this right-of-way, encompassed in this grant, or a portion thereof, is conveyed out of Federal ownership and administration of the ROW or the land underlying the ROW is not being reserved to the United States in the patent/deed and/or the ROW is not within a ROW corridor being reserved to the United States in the patent/deed, the United States waives any right it has to administer the right-of-way, or portion thereof, within the conveyed land under Federal laws, statutes, and regulations, including the regulations at 43 CFR Part [2800][2880], including any rights to have the holder apply to BLM for amendments, modifications, or assignments and for BLM to approve or recognize such amendments, modifications, or assignments. At the time of conveyance, the patentee/grantee, and their successors and assigns, shall succeed to the interests of the United States in all matters relating to the right-of-way, or portion thereof, within the conveyed land and shall be subject to applicable State and local government laws, statutes, and ordinances. After conveyance, any disputes concerning compliance with the use and the terms and conditions of the ROW shall be considered a civil matter between the patentee/grantee and the ROW Holder.
- 2.9. Within 90 days of construction completion, the Holder shall provide the Authorized Officer with data in a format compatible with the Bureau's Arc-Info Geographic Information System to accurately locate and identify the right-of-way:

Acceptable data formats are:

Corrected Global Positioning System files with sub-meter accuracy or better, in UTM NAD 83; Zone 11;
ARCGIS export files on a CD ROM, shapefile, geodatabase.

Data may be submitted in any of the following formats:

ARCGIS interchange, shapefile or geodatabase format.
CD ROM in compressed or uncompressed format.

All data shall include metadata for each coverage, and conform to the Content Standards for Digital Geospatial Metadata Federal Geographic Data Committee standards. Contact the GIS Department at (702) 515-5000.

3.0 Air Quality

- 3.1. The Holder shall not violate applicable air standards or related facility siting standards established by or pursuant to applicable federal, state, or local laws or regulations. The Holder shall be responsible for dust abatement within the limits of the right-of-way and is responsible for obtaining all necessary permits from appropriate authorities for acceptable dust abatement and control methods (e.g., water, chemicals). The Holder shall be solely responsible for all violations of any air quality permit, law or regulation, as a result of its action, inaction, use or occupancy of the right-of-way.

Notwithstanding whether a violation of any air quality permit, law or regulation results, the Holder will cooperate with the Authorized Officer in implementing and maintaining reasonable and appropriate dust control methods in conformance with law and appropriate to the circumstances at the sole cost of the Holder.

Prior to relinquishment, abandonment, or termination of this right-of-way, the Holder shall apply reasonable and appropriate dust abatement and control measures to all disturbed areas. The abatement and measures shall be designed to be effective over the long-term (e.g., rock mulch or other means) and acceptable to the Authorized Officer.

- 3.2. During excavation, backfilling, and contouring, the disturbed soil should be wetted sufficiently in order to effectively reduce airborne dust and reduce soil erosion.

4.0 Cultural

- 4.1. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the Holder, or any person working on his behalf on public or Federal lands shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The Holder will be responsible for the cost of evaluation. Any decision regarding suitable mitigation measures will be made by the Authorized Officer after consulting with the Holder. Holder shall be responsible for the resultant mitigation costs.

5.0 Hazardous Material/Pesticides/Liability

- 5.1. If any hazardous material, substance, or hazardous waste, will be used, the product, stored, or transported on or within the right-of-way area or facilities located thereon, or used in the construction, operation, maintenance or termination of the right-of-way or any of its facilities, the Holder shall submit a Plan of Development in accordance with the requirements enumerated in the BLM Handbook 2801-1.

6.0 Mineral Material

- 6.1. Mineral material generated, and not needed for the development of the proposed action within the right-of-way site, requires a specific BLM use authorization in accordance with regulations at 43 CFR 3600 prior to the removal of in place excess mineral material.

7.0 Survey Monuments

- 7.1. Holder shall protect all survey monuments found within the authorization area. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coast and Geodetic Survey benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. If any of the above are to be disturbed during operations, the holder shall secure the services of a Professional Land Surveyor or Bureau cadastral surveyor to perpetuate the disturbed monuments and references using surveying procedures found in the Manual of Instructions for the Survey of the Public Lands of the United States and Nevada Revised Statutes, Chapter 329, Perpetuation of Corners. The holder shall record such survey in the appropriate county and send a copy to the authorized officer. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monuments, the holder shall be responsible for the survey cost.

8.0 Vegetation/Noxious Weeds/Land surface Treatment/Soil/Water/Riparian

- 8.1. The Holder shall be responsible for weed control on disturbed areas within the limits of the right-of-way. The Holder is responsible for consultation with the Authorized Officer and/or local authorities for acceptable weed control methods within limits imposed in the right-of-way stipulations.
- 8.2. Land surface treatment for areas previously disturbed: Following excavation, trenches will be backfilled with the excavated soil. The soil will be distributed and contoured evenly over the surface of the disturbed area. The soil surface will be left rough to help reduce potential wind erosion.
- 8.3. Land surface treatment for areas previously undisturbed: Strip the top three to six inches of soil material with associated plant material over all surfaces to be disturbed by construction. Stockpile this material along the course of construction will be salvaged and transplanted out of harm's way but still within the right of way. At the conclusion, including trench backfilling and compaction, replace the stockpiled soil with plant debris uniformly back on the surface of the disturbed area.
- 8.4. Soil/Water/Riparian: If work is to occur in Ephemeral channels, need to consult with Army Corp of Engineers (ACOE) and Nevada Department of Environmental Protection (NDEP). If drilling boreholes, holder needs to follow Nevada Administrative Code (NAC) protocols for drilling. Consult with ACOE to make sure you do not need a 404 permit.

9.0 Migratory Birds

- 9.1. The holder agrees to survey for nests or migratory birds between the periods of March 15 through July 30, and should a nesting be found the Holder will use a properly qualified personnel, as agreed upon by BLM and the Holder, to avoid the nest or minimize adverse impact to the nest and nestling, including relocation of the nest if appropriate. The Holder will consult with the Authorized Office on a case by case basis to determine the appropriate minimization efforts.

10.0 Threatened and Endangered Species

- 10.1. The holder shall abide by the terms and conditions of Biological Opinion File No. 1-5-96-F-023R.3 for the Las Vegas Valley, on file at the Bureau of Land Management Office, Las Vegas, Nevada, and as shown below.
- 10.2. In addition to the attached terms and conditions, the proponent is required to adhere to the following: Trench shall be backfilled or covered at the end of each day during hours of inactivity or the trenches shall be dug in such a manner that the side and/or end walls are contoured to allow any animals that inadvertently fall in, a means to climb out.

Terms and Conditions of Biological Opinion 1-5-96-F-23R.3

In order to be exempt from the prohibitions of section 9 of the Endangered Species Act, BLM must comply with the following terms and conditions, which implement the reasonable and prudent measures. These terms and conditions are non-discretionary.

1. To implement Reasonable and Prudent Measure Number 1, BLM shall fully implement the following measures to minimize take of desert tortoises due to activities associated with construction or development activities:
 - a. Applicants or project proponents will search for and remove tortoises from project areas within the programmatic area if (1) survey data indicate that tortoises are present based on observation of live tortoises, recent sign, or active burrows, (2) tortoises may be relocated to secure habitat within 2 miles from the point of capture and barriers will exist to prevent tortoises from re-entering project areas and appear in harm's way, and (3) the tortoises appear to be healthy, unless the Service determines that survey and removal will not contribute toward recovery.

N-90405, N-90405-01 does not meet the required conditions as stated in term and condition 1.a. as there is secured habitat within two miles of the project site to relocate tortoises but there is not barrier to prevent relocated tortoises from returning to the project area. Therefore, a clearance survey is voluntary. If a clearance is conducted, any tortoises found must be relocated following term and condition 1.b.

The proponent is required to have an authorized biologist on call to relocate any desert tortoises that enter the work area. If tortoises are encountered that must be moved out of harm's way, the biologist will contact the BLM wildlife staff at (702) 515-5000 to identify the relocation site or whether the animal will be transferred to the Clark County Tortoise Pick-up Service.

Applicants or project proponents shall contract an authorized desert tortoise biologist to conduct the clearance and removal. Only individuals trained to handle desert tortoises in accordance with Service-approved guidelines shall be authorized to handle desert tortoises, unless they are in imminent danger. Currently, the Service-approved handling guidelines are described in Guidelines for Handling Desert Tortoises during Construction Projects (Desert Tortoise Council 1994, revised 1999). Tortoises shall not be placed on private lands or lands under management by an agency other than BLM, without written permission of the landowner or agency. If unforeseen circumstances occur that would

question the survival of tortoises potentially relocated from project areas, BLM shall coordinate with the Service on the disposition of such tortoises.

- b. If a tortoise is in imminent danger with immediate death or injury likely (such as from an approaching vehicle or equipment), and the tortoise has been given the opportunity to move but has withdrawn in its shell and is not moving, onsite personnel may capture the tortoise and place it in a clean unused cardboard box or similar container. If tortoises are found that cannot be relocated as described in Term and Condition 1.a., Clark County's tortoise pick-up service will be notified immediately. The contained tortoise will be held in the shade or a temperature-controlled environment until removed by the pick-up service.
2. To implement Reasonable and Prudent Measure Number 2, BLM shall fully implement the following measures minimize destruction of desert tortoise habitat, such as soil compaction, erosion, or crushed vegetation:
- a. BLM shall ensure that a fee is paid at the current rate of \$786 per acre of disturbance, as indexed for inflation, prior to surface disturbance with the following exceptions:
 - (1) R&PP leases would be issued prior to payment of remuneration fees. Payment of fees on R&PP leases shall be deferred until immediately prior to surface disturbance. If the R&PP project consists of phased development of the lease area, fees shall be paid for each phase immediately prior to surface disturbance. Likewise, road ROW issued to local governments (e.g., Clark County, cities of Las Vegas, North Las Vegas, Henderson, Mesquite, and Boulder City) may be issued before payment of fees. If payment of remuneration fees is postponed for any project, the applicant must submit a request for a Notice to Proceed before surface disturbance. The applicant shall provide BLM with proof of payment of the required remuneration fees, before BLM issues the Notice to Proceed. Both of these actions shall occur prior to surface disturbance. A Notice to Proceed shall be issued for each segment of right-of-way as payment is made.
 - (2) Because many mining plans of operation are phased in over a number of years, remuneration fees shall be paid for each phase immediately prior to surface disturbance.
 - (3) Projects impacting less than 0.25 acres will not be assessed a remuneration fee.
 - (4) Mineral material sales will be charged a fee of 25 cents per yard up to the equivalent of \$786 per acre of disturbance.

The fee rate will be indexed for inflation based on the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U) on January 31st of each year. The next adjustment shall occur on January 31, 2012, and will become effective March 1, 2012. Fees assessed or collected for projects covered under this biological opinion after March 1st of each year will be adjusted based on the CPI-U. Information on the CPI-U can be found on the Internet at:

<http://stats.bls.gov/news.release/cpi.nr0.htm>

This fee will be paid directly to the Bureau of Land Management, Information Access Center. These funds are independent of any other fees collected by the Bureau of Land Management for desert tortoise conservation planning.

The surface disturbance for this project is 2.32 acres. The total fee for this project is \$1,823.52 (\$786.00 x 2.32 acres).

The payment shall be accompanied by the **Section 7 Fee Payment Form**, (Attachment) and completed by the payee. Payment shall be by certified check or money order payable to Bureau of Land Management. Checks may be delivered in person at the BLM Information Access Center (IAC). For US Postal Service, private parcel services, such as Fed-Ex or UPS, use the physical address.

Physical Address: Bureau of Land Management
Attn: Information Access Ctr
1340 Financial Blvd.
Reno, NV 89502

- b. The boundaries of project areas shall be flagged or marked and all equipment, vehicles, and construction materials will remain within the project site or authorized areas. Staging areas will be located in previously disturbed areas whenever possible. Cross-country travel and travel outside authorized areas will be prohibited.
3. To implement Reasonable and Prudent Measure Number 3, BLM shall fully implement the following measure to minimize injury or mortality of desert tortoises during handling and/or removal from BLM lands within the action area:
- a. In accordance with Procedures for Endangered Species Act Compliance for the Mojave Desert Tortoise (Service 1992), an authorized desert tortoise biologist should possess a bachelor's degree in biology, ecology, wildlife biology, herpetology, or closely related fields. The biologist must have demonstrated prior field experience using accepted resource agency techniques to survey for desert tortoises and tortoise sign. As a guideline, an authorized biologist should have 60 field days of experience. In addition, the biologist shall have the ability to recognize and accurately record survey results.
 - b. All burrows found during clearance surveys within areas proposed for disturbance, whether occupied or vacant, will be excavated by an authorized desert tortoise biologist and collapsed or blocked to prevent desert tortoise reentry. All burrows will be excavated with hand tools to allow removal of desert tortoises or desert tortoise eggs. All desert tortoise handling and excavations, including nests, will be conducted by an authorized desert tortoise biologist in accordance with Service-approved protocol (Desert Tortoise Council 1994, revised 1999).
 - c. All located desert tortoises and desert tortoise eggs will be relocated offsite 300 feet to 2 miles into adjacent undisturbed habitat. Tortoises found aboveground will be placed under a bush in the shade. A tortoise located in a burrow will be placed in an existing unoccupied burrow of the same size and orientation as the one from which it was taken. If a suitable natural burrow is unavailable or the occupancy status of the burrow is in question, an authorized desert tortoise biologist will construct one of the same size and orientation as the one from which it was removed using the

protocol for burrow construction in Section B-5-f (Desert Tortoise Council 1994, revised 1999).

- d. Any tortoise found within one hour before nightfall will be placed in a separate clean cardboard box and held in a cool, predator-free location. The box will be covered and kept upright at all times to minimize stress to the tortoise. Each box will be used once and then disposed of properly. The tortoise will be released the next day in the same area from which it was collected and using the procedures described above. Each tortoise will be handled with new disposable latex gloves. After use, the gloves will be properly discarded and a fresh set used for each subsequent tortoise handling.
 - e. Desert tortoises shall be treated in a manner to ensure that they do not overheat, exhibit signs of overheating (e.g., gaping, foaming at the mouth, etc.), or are placed in a situation where they cannot maintain surface and core temperatures necessary to their well-being. Desert tortoises shall be kept shaded at all times until it is safe to release them. No desert tortoise shall be captured, moved, transported, released, or purposefully caused to leave its burrow for whatever reason when the ambient air temperature is above 95°F (35°C). Ambient air temperature shall be measured in the shade, protected from wind, at a height of 2 inches (5 centimeters) above the ground surface. No desert tortoise shall be captured if the ambient air temperature is anticipated to exceed 95°F (35°C) before handling and relocation can be completed. If the ambient air temperature exceeds 95°F (35°C) during handling or processing, desert tortoises shall be kept shaded in an environment that does not exceed 95°F (35°C), and the animals shall not be released until ambient air temperature declines to below 95°F (35°C).
 - f. Project activities that may endanger a tortoise will cease if a tortoise is found on a project site. Project activities will resume after an authorized desert tortoise biologist removes the tortoise from danger or after the tortoise has moved to a safe area on its own volition.
 - g. A desert tortoise education program may be required on an action-specific basis if BLM biologist or Service believe that project personnel will encounter desert tortoises. The program would be presented to all personnel onsite during construction activities. This program would contain information concerning the biology and distribution of the desert tortoise, desert tortoise activity patterns, its legal status and occurrence in the proposed project area, the definition of "take" and associated penalties, measures designed to minimize the effects of construction activities, the means by which employees can facilitate this process, and reporting requirements to be implemented when tortoises are encountered.
4. To implement Reasonable and Prudent Measure Number 4, BLM shall fully implement the following measures to ensure compliance with the reasonable and prudent measures, terms and conditions, reporting requirements, and reinitiation requirements contained in this biological opinion:

All necessary information sheets and forms shall be completed by the proponent. Attachment A must be completed prior to BLM authorizing the action. The proponent must complete Attachment B and return it to the BLM within 30 days of completion of construction. These forms will be modified as necessary with the Service's concurrence.

Attachment A
SECTION 7 LAND DISTURBANCE FEE PAYMENT FORM

Biological Opinion File Number: 1-5-96-F-23R.3
Biological Opinion Issued By: Nevada Fish and Wildlife Office, Reno, Nevada
Species: Desert Tortoise (*Gopherus agassizii*) (Mojave population)
Project Name: Right-of-Way for an Underground Water Pipeline on Public Lands
Case File/Serial #: N-90405, N-90405-01
Project Proponent: Las Vegas Valley Water District
Phone Number: _____

Payment Calculations:	Clark County		County		County	
	Critical habitat	Non-critical habitat	Critical habitat	Non-critical habitat	Critical habitat	Non-critical habitat
# acres anticipated to be disturbed on federal land		2.32				
Fee rate (per acre)		786				
Total cost/habitat type (per county)	\$ -	\$1,823.52	\$ -	\$ -	\$ -	\$ -
Total cost per county	\$ 1,823.52		\$ -		\$ -	

Total payment required (all counties): \$ 1,823.52

Amount paid: _____ **Date:** _____ **Check/Money Order #:** _____

Authorizing agencies: Bureau of Land Management, Las Vegas, Nevada

Make check payable to: Bureau of Land Management

Deliver check to: **Physical Address**
 Bureau of Land Management
 Attn: Information Access Ctr
 1340 Financial Blvd.
 Reno, NV 89502

Credit Card Payments: Contact BLM State Office Public room at 775-861-6500
 For BLM Public Room

Process check to:
 Contributed Funds-All Other
 WBS: LVTFFX000800
 7122 FLPMA
 All other Res. Dev. Project and Management
 Remarks: LLNV934000 L71220000.JP0000 LVTFFX000800 Desert Tortoise Conservation Program

Please provide a copy of this completed payment form and the payment receipt to NV-930, Attn: T&E Program Lead
****T&E Program Lead will provide a copy to the appropriate District Office(s)**

Attachment B
DESERT TORTOISE SECTION 7 COMPLIANCE FORM
Entire form is to be completed by the project proponent and delivered to the Bureau of Land Management within 30 days of project completion

Biological Opinion File Number: 1-5-96-F-023.R3
Species: desert tortoise (*Gopherus agassizii*)

Project Name: Right-of-Way for an Underground Water Pipeline on Public Lands
Case File No: N-90405, N-90405-01
Acreage of Disturbance Authorized: 2.32
Acreage Actually Disturbed: _____
Fees Assessed: \$1,823.52 Rate: \$786 per acre

In accordance with this biological opinion, applicants or project proponents may voluntarily choose to search for and remove tortoises from lands to be disturbed within the project area.

- ☐ Desert tortoise survey conducted Date(s): _____
- ☐ Voluntary desert tortoise survey conducted
- ☐ No desert tortoise survey conducted

☐ Migratory bird survey conducted Date(s): _____

Number of desert tortoises injured: _____
Number of desert tortoises killed: _____
Number of desert tortoises removed from the project site: _____
Number relocated to adjacent habitat within 2 miles: _____
Number transferred to the Clark County Tortoise Pick-up Service: _____

(Provide a report detailing all tortoise encounters and what happened to the animals. This report will include age class, gender, and health of each animal, maps showing where each tortoise was captured and later relocated, and the air temperature during the relocation.)

Company and persons who conducted the survey and removal¹:

Company: _____
Name: _____
Address: _____
Phone: _____
State Permit #: _____

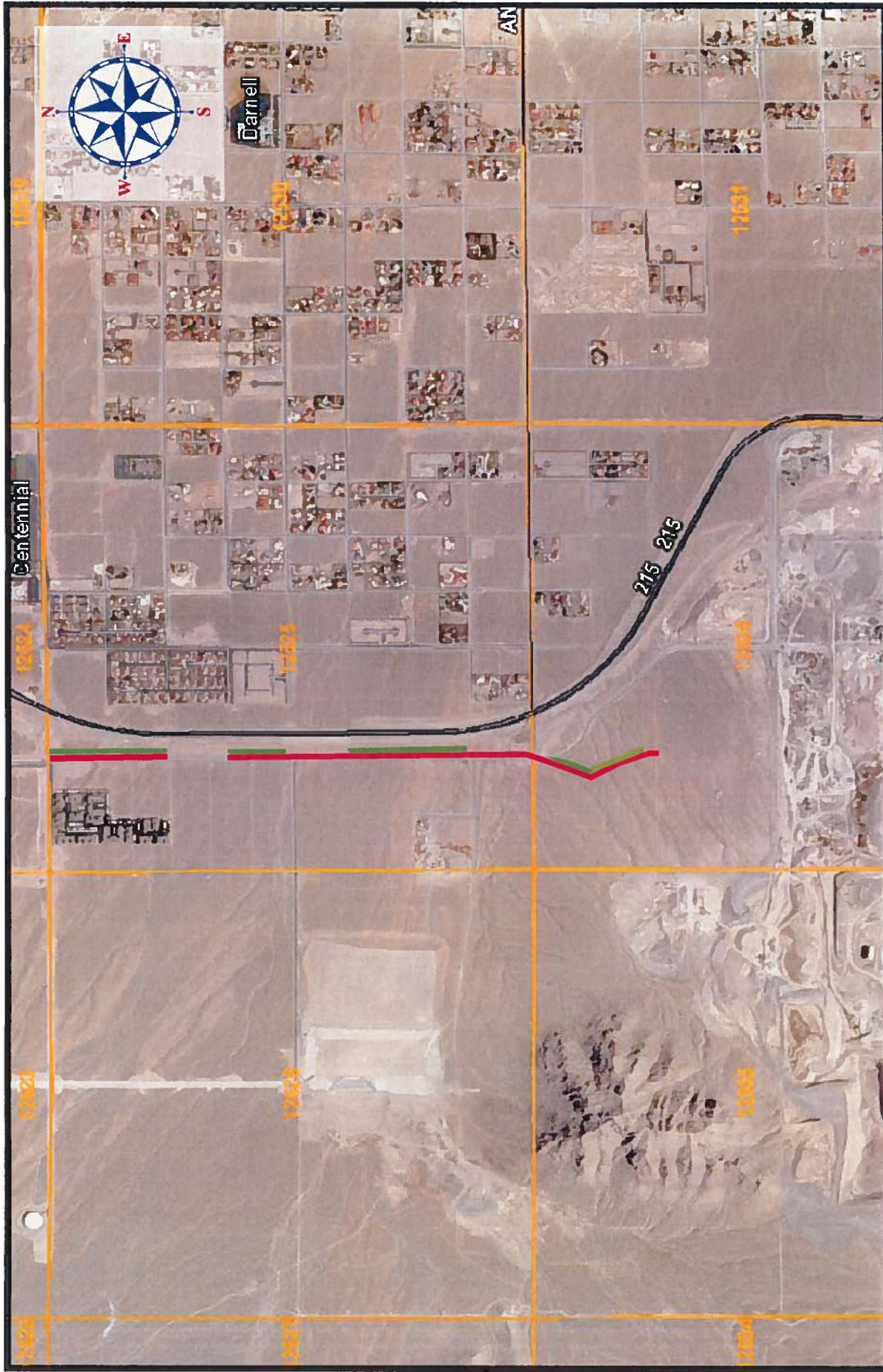
Deliver this completed form to: Bureau of Land Management
Division of Renewable Resources
4701 N. Torrey Pines Drive
Las Vegas, NV 89130
(702) 515-5000

If you have questions, call the BLM's Wildlife staff at (702) 515-5000.

Revised 07/13/2005

¹ BLM approval of biological monitors/surveyors required. Submit resumes for review/approval at least 15 days prior to construction.

Appendix B. – EXHIBIT B —MAPS



LEGEND

- Permanent Right of Way
- Short term Right of Way

Exhibit B- Aerial Map

Township 19S Range 59E
Section 25, 36

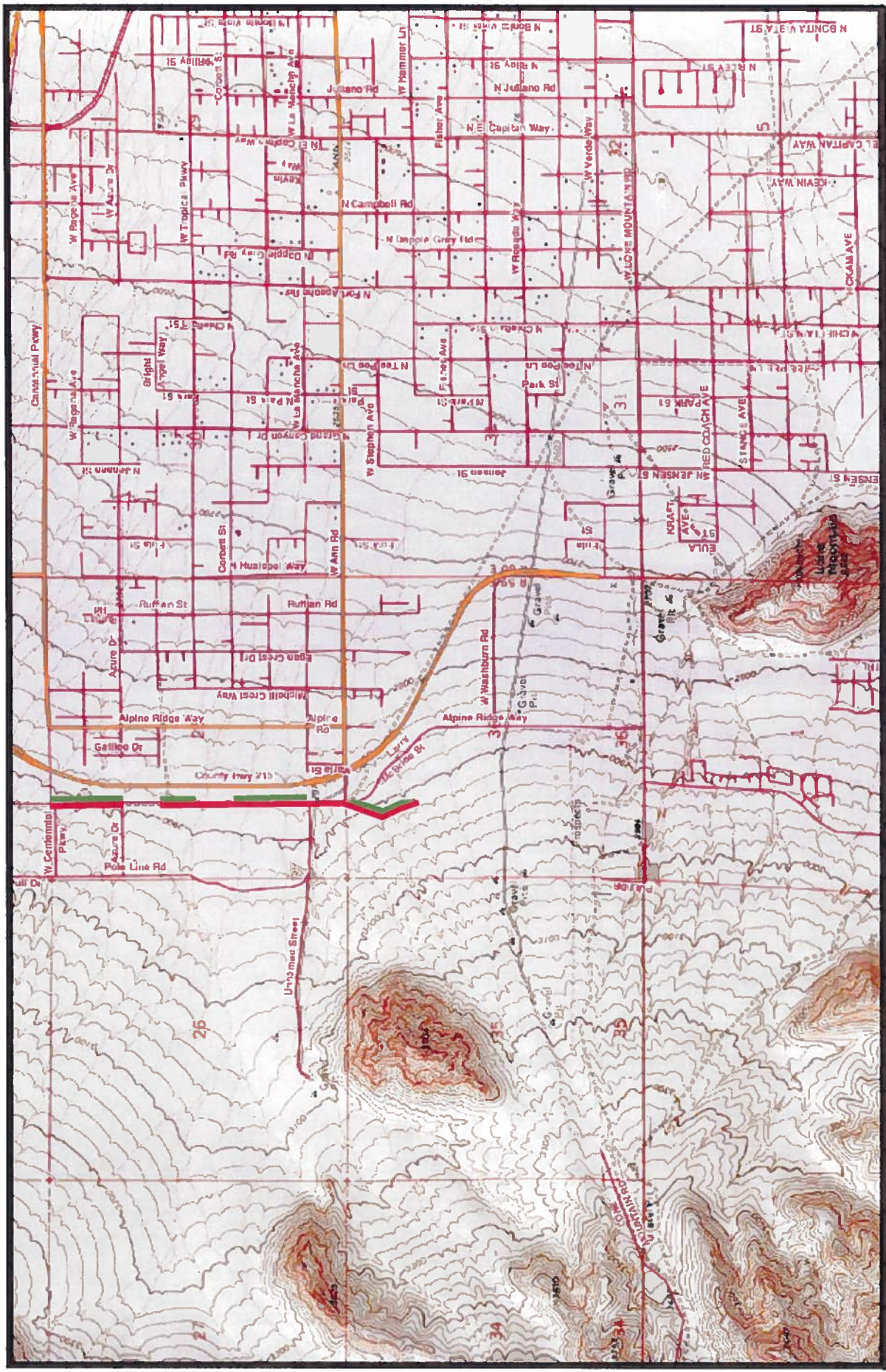




Exhibit B- USGS Map
Township 19S Range 59E
Section 25, 36

LEGEND

- Permanent Right of Way
- Short term Right of Way



NOTES

This map is for assessment use only and does NOT represent a survey.

No liability is assumed for the accuracy of the data delineated herein information on roads and other non-assessed parcels may be obtained from the Road Document Listing in the Assessor's Office.

This map is compiled from official records, including surveys and deeds, but only contains the information required for assessment. See the recorded documents for more detailed legal information.

MAP LEGEND

PARCEL BOUNDARY
 SUB BOUNDARY
 PMAD BOUNDARY
 MATCH LEADERSHIP
 HISTORIC SUB BOUNDARY
 SECTION LINE
 CONDOMINIUM UNIT
 AIR SPACE PCL
 RIGHT OF WAY PCL
 SUB SURFACE PCL
 001 PARCEL NUMBER
 100 ACREAGE
 202 PARCEL SURFNO NUMBER
 PMAD PLAT RECORDING NUMBER
 5 BLOCK NUMBER
 2 LOT NUMBER
 1000 LOT NUMBER

126-25-1

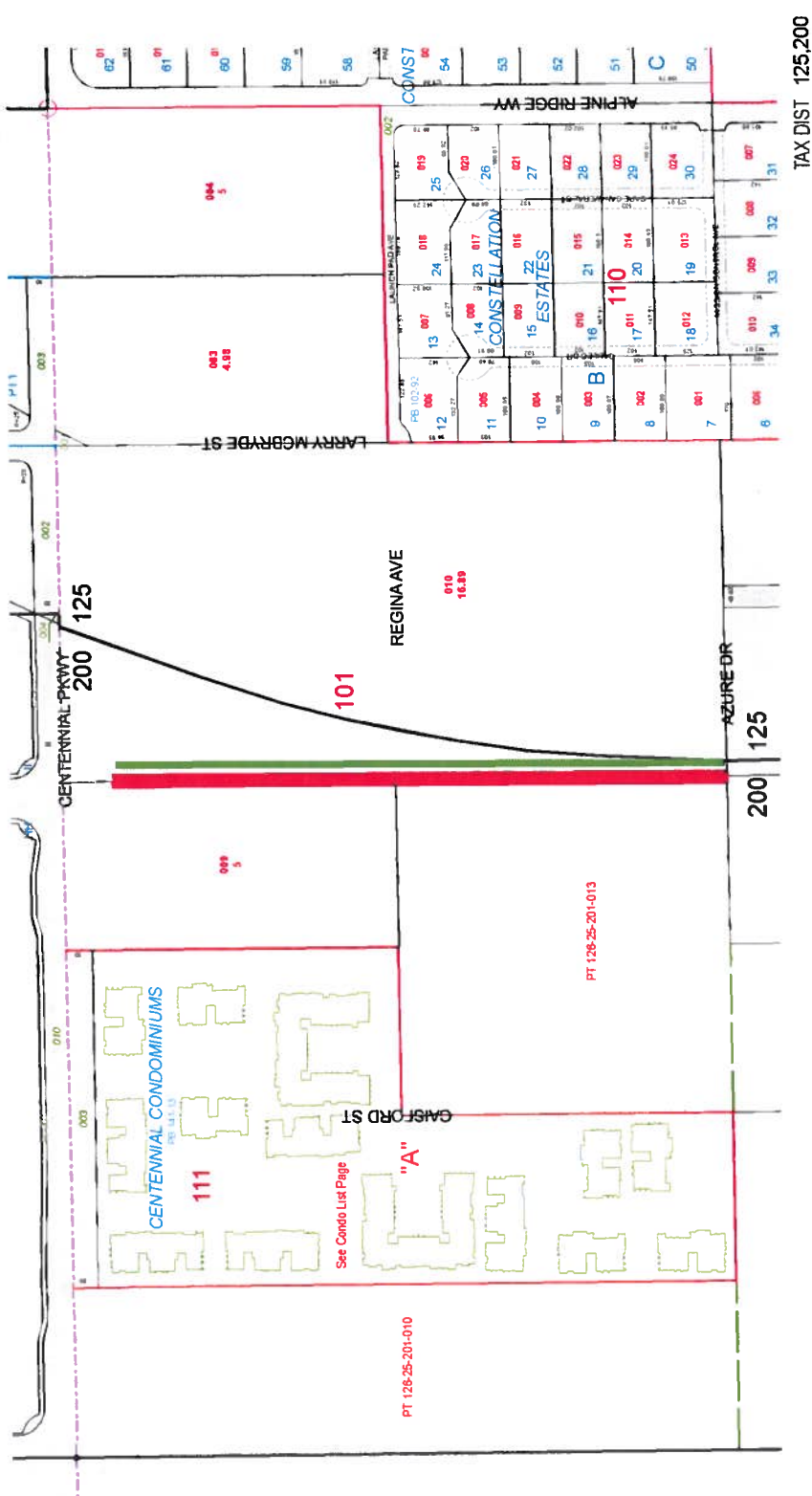
N 2 NW 4

25

T19S R59E

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Scale: 1" = 200' Rev. 02/09/2011

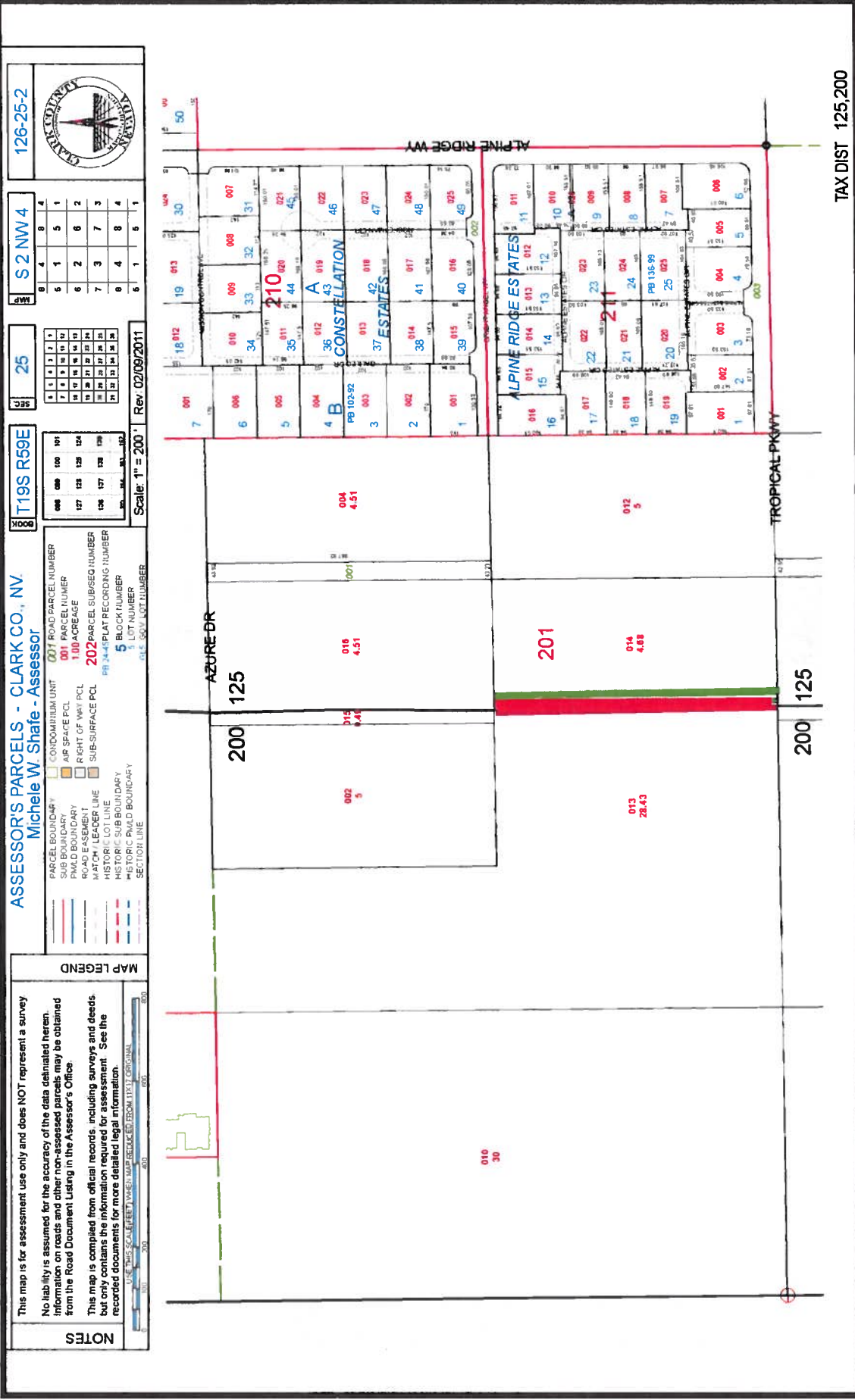


LEGEND

- Permanent Right of Way
- Short term Right of Way

Exhibit B Township 19S Range 59E Section 25 (1 Of 6)





LEGEND

- Permanent Right of Way
- Short term Right of Way

Exhibit B- Assessor Parcel Maps

Section 25
(2 Of 6)



TAX DIST 125,200



[illegible]

TAX DIST 125,200

Exhibit B- Assessor Parcel Maps

Section 25
(4 of 6)

LEGEND

- Permanent Right of Way
Short term Right of Way

NOTES

This map is for assessment use only and does NOT represent a survey. No liability is assumed for the accuracy of the data delineated herein. Information on roads and other non-assessed parcels may be obtained from the Road Document Listing in the Assessor's Office.

This map is compiled from official records, including surveys and deeds, but only contains the information required for assessment. See the recorded documents for more detailed legal information.

USE THIS SCALE (FEET) WHEN DATA PRODUCED FROM THIS ORIGINAL

0 100 200 300 400 500

MAP LEGEND

- PARCEL BOUNDARY
- SUB BOUNDARY
- ROAD EASEMENT
- MATCH / LEADER LINE
- HISTORIC LOT LINE
- HISTORIC SUB BOUNDARY
- HISTORIC PMLD BOUNDARY
- SECTION LINE
- CONDOMINIUM UNIT
- AIR SPACE PCL
- RIGHT OF WAY PCL
- SUBSURFACE PCL

ASSESSOR'S PARCELS - CLARK CO., NV.
Michele W. Shafe - Assessor

T19S R59E

36

S 2 NW 4

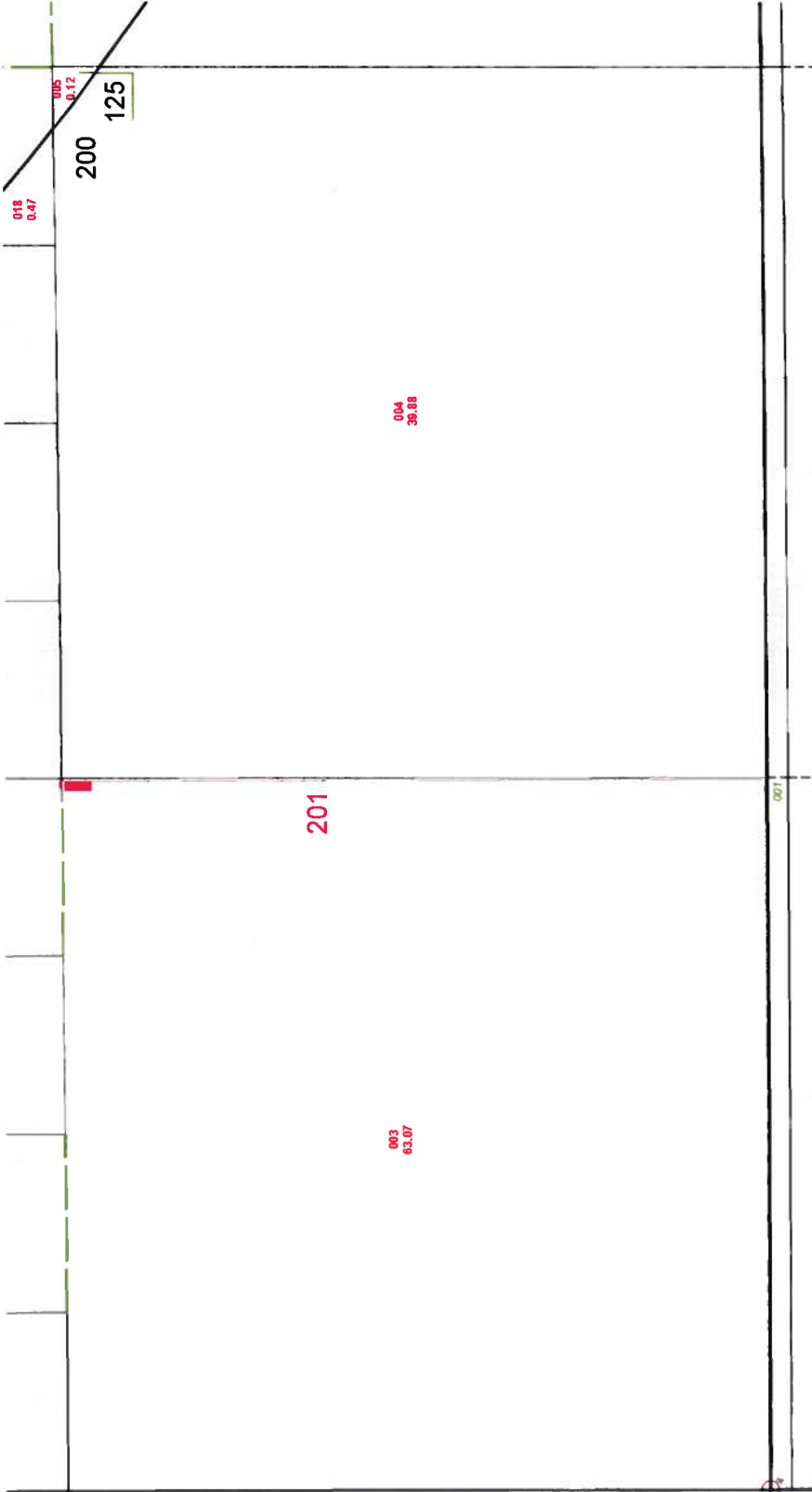
126-36-2

8	4	0	4
6	1	5	1
6	2	6	2
7	3	7	3
8	4	8	4
6	1	5	1

000	000	100	101
127	126	125	124
126	127	128	129
125	124	123	122
124	123	122	121
123	122	121	120

007 ROAD PARCEL NUMBER
 001 PARCEL NUMBER
 100 ACREAGE
 202 PARCEL SUBSEQ NUMBER
 PB 24.45 FLAT RECORDING NUMBER
 5 BLOCK NUMBER
 7 LOT NUMBER
 91.5 GOV LOT NUMBER

Scale: 1" = 200'
 Rev: 04/14/2011



TAL DIST 200

LEGEND

- Permanent Right of Way
- Short-term Right of Way

Exhibit B
 Township 19S Range 59E
 Section 36
 (6 Of 6)



Appendix C. - EXHIBIT C —MASTER TITLE PLAT

STATUS OF PUBLIC DOMAIN
LAND AND MINERAL TITLES

MT PLAT

Suppl Sec 13, 24, 25, 36

[illegible]

FOR POSSIBLE EFFECTS DISPOSAL OR USE OF
SINKED LARVAL WITHIN FOR CLASSIFICATION
CENTRAL WATER AND/OR OTHER PUBLIC PURPOSES
OFFER TO MAKE OF MISCELLANEOUS DOCUMENTS

Over the years in June 15, 1973, and 1974, and 1975, the following data were obtained by numerous public and private sources. The data are presented in Table 1. The data are presented in Table 1. The data are presented in Table 1.

[illegible][illegible][illegible]

U.S. DEPARTMENT OF JUSTICE, OFFICE OF ATTORNEY GENERAL

It is now well established that the β -casein gene is located on chromosome 6p21.3, approximately 100 kb from the α -casein gene. The β -casein gene is approximately 10 kb in length and contains 10 exons. The β -casein gene is highly polymorphic, with over 100 alleles identified to date. The β -casein gene is highly conserved among mammals, with over 90% identity between human and mouse sequences. The β -casein gene is highly expressed in mammary tissue, with levels of expression increasing during lactation. The β -casein gene is highly regulated, with expression controlled by a complex set of regulatory elements. The β -casein gene is highly polymorphic, with over 100 alleles identified to date. The β -casein gene is highly conserved among mammals, with over 90% identity between human and mouse sequences. The β -casein gene is highly expressed in mammary tissue, with levels of expression increasing during lactation. The β -casein gene is highly regulated, with expression controlled by a complex set of regulatory elements.

4. **Answer: A.** The patient's symptoms are consistent with a diagnosis of a urinary tract infection (UTI). The most common cause of UTI is *Escherichia coli*, which is a gram-negative bacillus. The other options are not typical causes of UTI.

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

Author's address: Department of Mathematics, University of California, San Diego, La Jolla, CA 92037, USA.
E-mail: shashank@ucsd.edu

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

[illegible]

12/1/09	H3
11/3/09	H3
11/2/10	H3
11/1/11	H3

050
195
38E



endpoints. [12]

A hand-drawn diagram of a horizontal beam, labeled "SCALE" in the center. A vertical line passes through the center of the beam, and a horizontal line is drawn along the top edge of the beam.

Exhibit C- Master Title Plat

**Township 19S Range 59E
Section 25 and 36**

Permanent Right of Way
Short term Right of Way

